

PROJECT 10073 RECORD

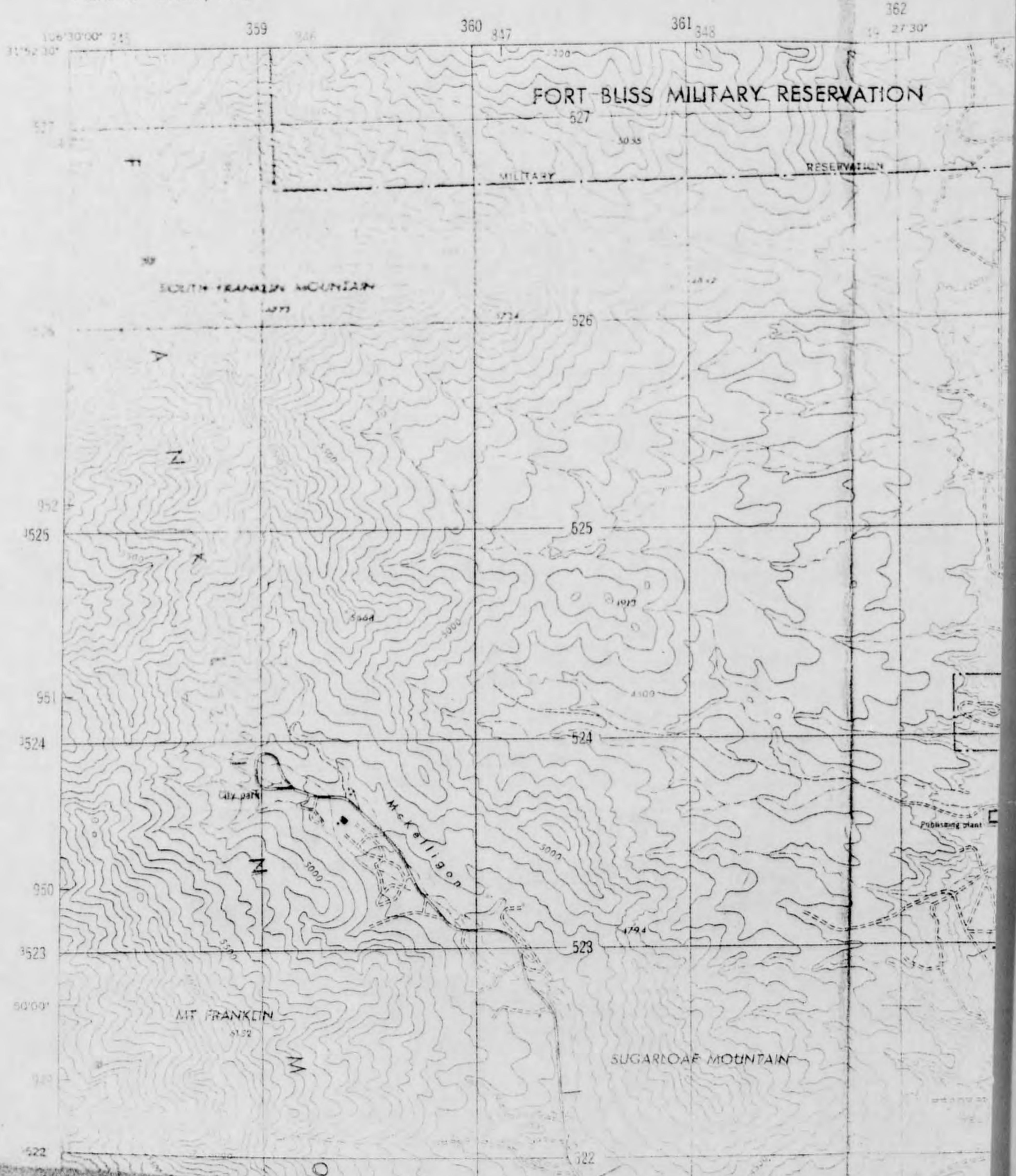
1. DATE - TIME GROUP 30 April 49 01/04/15Z	2. LOCATION Albuquerque, New Mexico
3. SOURCE Civilian	10. CONCLUSION Astro (METEOR)
4. NUMBER OF OBJECTS One	
5. LENGTH OF OBSERVATION Two seconds	11. BRIEF SUMMARY AND ANALYSIS Observer sighted a round blue-green object. It was very bright and heading West. It simply went out after about two seconds.
6. TYPE OF OBSERVATION Ground-Visual	
7. COURSE West	
8. PHOTOS <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
9. PHYSICAL EVIDENCE <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

FORM

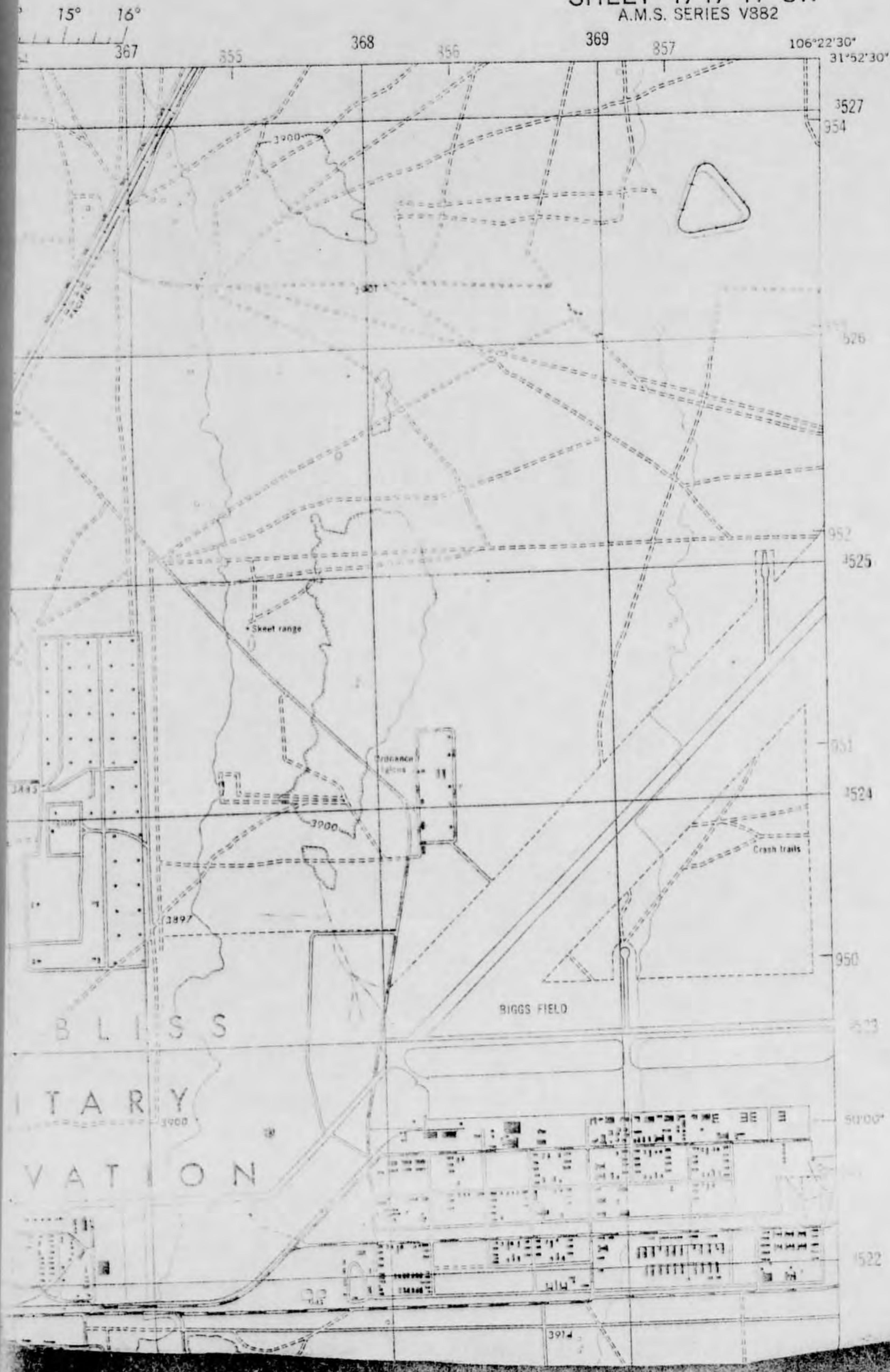
NAD 37886

TEXAS 1:25,000

TYPE F - AMS 1

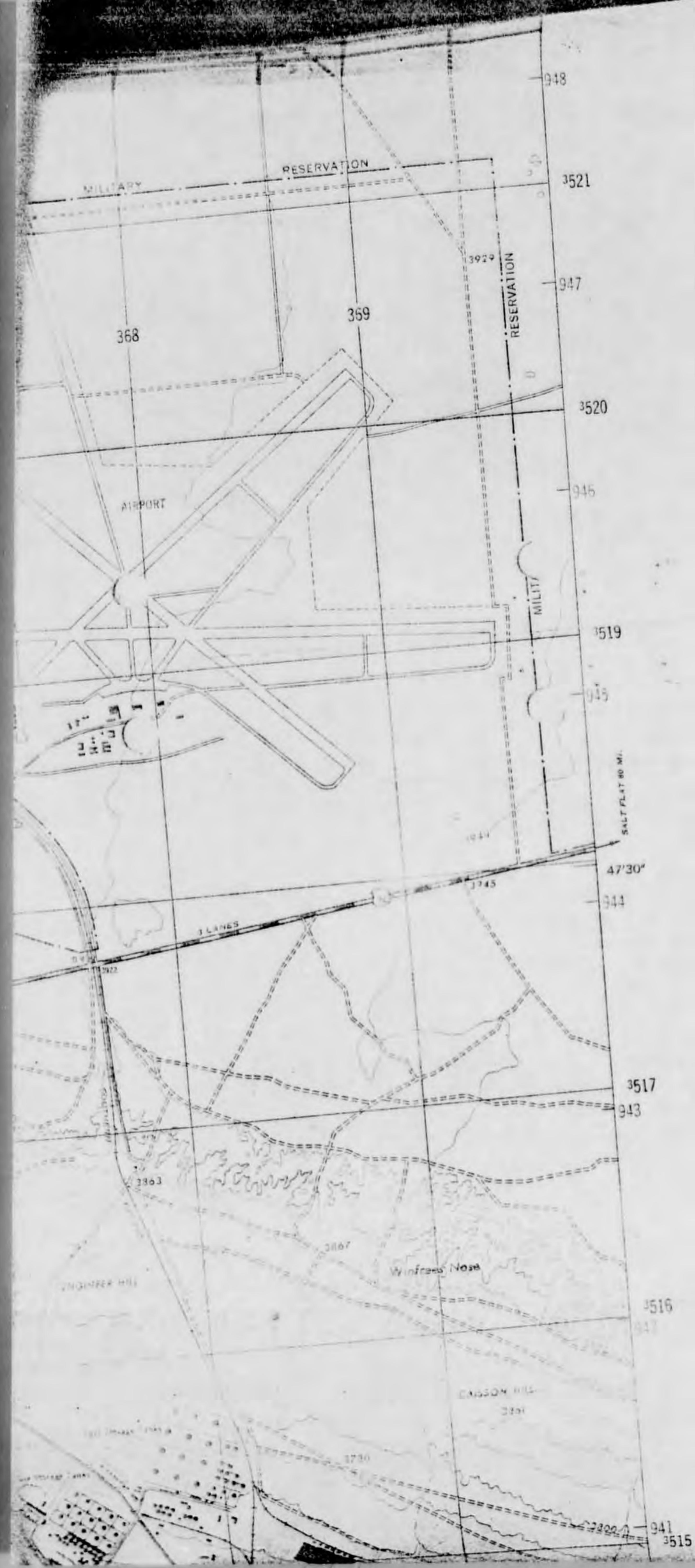


SHEET 4747 IV SW
A.M.S. SERIES V882











Prepared under the direction of the Chief of Engineers by the Army Map Service (AM), Corps of Engineers, Department of the Army, Washington, D. C. Compiled in 1947 from Texas, 1:62,500, USGS, Fort Bliss, 1945. Planimetric detail revised from aerial photography by photo-planimetric methods. Aerial photography by U. S. Air Force, 1944-46. Horizontal and vertical control by USGS and USC&GS. Planimetry field edited 1947.

LEGEND

Tint indicates built-up areas in which only landmark buildings are shown
ROAD DATA 1947

In developed areas, only through roads are classified.

Hard surface, heavy duty road, more than two lanes wide

LANES

Loose surface, graded and drained, or narrow hard surface road

Hard surface, heavy duty road, two lanes wide; Federal route marker

LANES

Improved dirt road or street

Hard surface, medium duty road, more than two lanes wide

LANES

Unimproved dirt road

Hard surface, medium duty road, two lanes wide; State route marker

LANES

Trail

RAILROADS

Single track Double track

Standard gauge

Horizontal control point

△

Narrow gauge

Bench mark, monumented

BM

732

Railroad in street

Bench mark, non-monumented

X

431

Carline

Spot elevation in feet

168

BOUNDRARIES

National

Cemetery

Can

State (with monument)

Woods or brushwood

000000

000000

County

Orchard

000000

000000

County subdivision

Vineyard

000000

000000

Corporate limits

Intermittent lake

000000

000000

Reservation

Intermittent stream; Dam

000000

000000

Military reservation

MIL RES

Swamp, marsh

000000

000000

Rapids; Falls

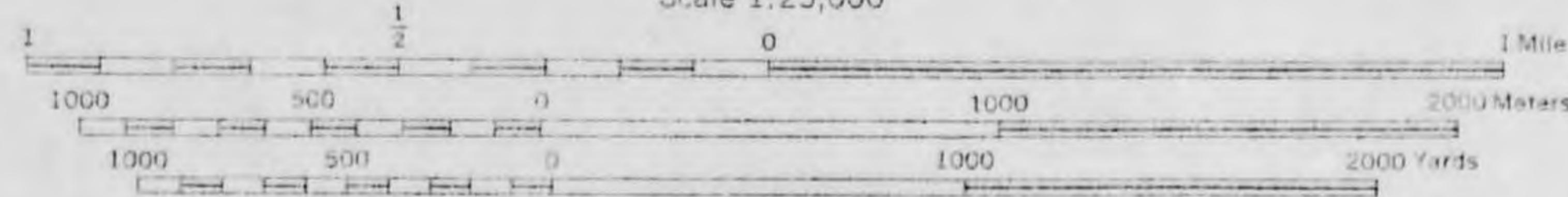
000000

000000

Large rapids and falls



Scale 1:25,000



CONTOUR INTERVAL 20 FEET
DATUM IS MEAN SEA LEVEL
TRANSVERSE MERCATOR PROJECTION
NORTH AMERICAN DATUM

ONE THOUSAND METER UNIVERSAL TRANSVERSE MERCATOR GRID ZONE 13

BROWN NUMBERED TICKS INSIDE THE SEATLINE INDICATE

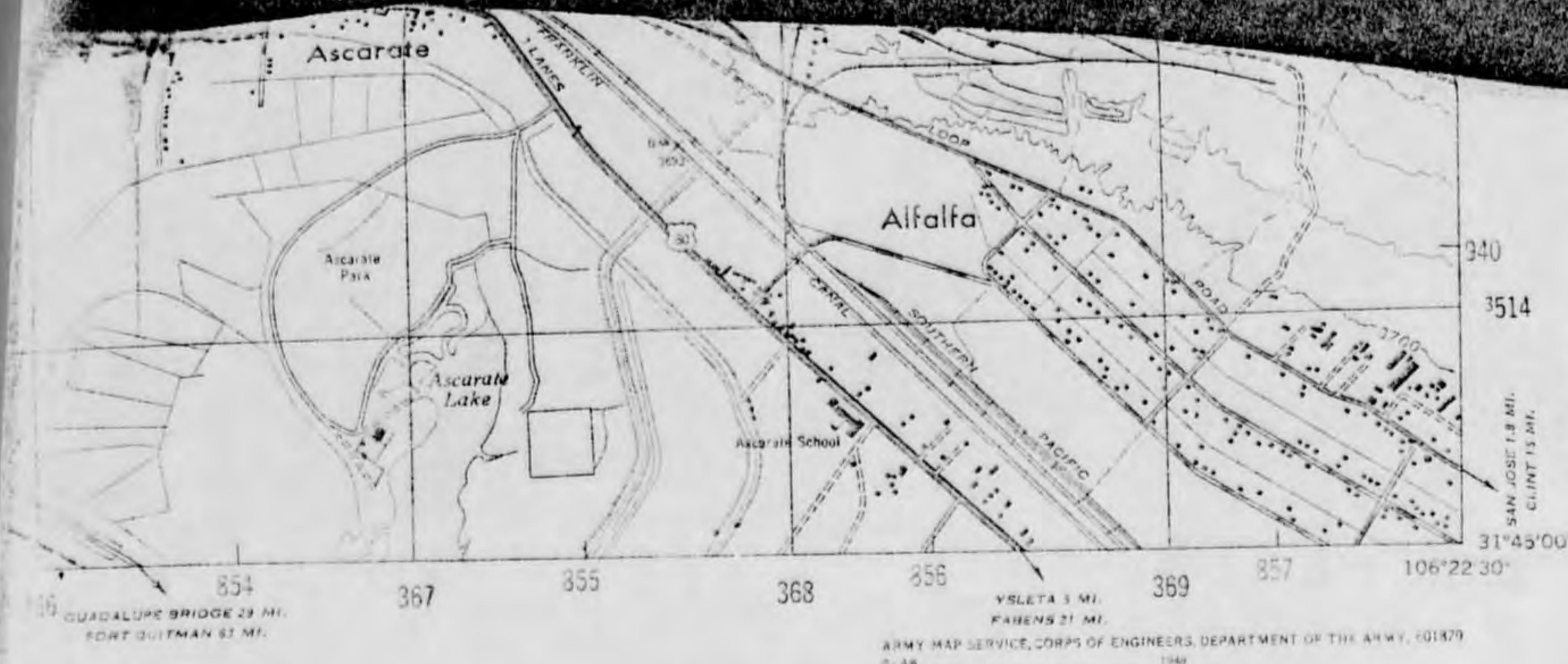
THE 1000 YARD U.S. POLYCONIC GRID ZONE E

THE LAST THREE DIGITS OF THE GRID NUMBERS ARE OMITTED

USERS NOTING ERRORS OR DEFICIENCIES IN THIS MAP ARE URGED TO MARK THEREON AND FORWARD DIRECTLY TO CHIEF ENGINEER, ARMY MAP SERVICE, WASHINGTON, D. C. MAPS SO FORWARDED WILL BE RETURNED OR REPLACED IF DESIRED.



APPROXIMATE MEAN DECLINATION 1947
FOR CENTER OF SHEET
ANNUAL MAGNETIC CHANGE 1' WESTERLY
Use diagram only to obtain numerical values. To determine magnetic north line, connect the pivot point "P" on the south edge of the map with the value of the angle between GRID NORTH and MAGNETIC NORTH, as plotted on the degree scale at the north edge of the map.



ARMY MAP SERVICE, CORPS OF ENGINEERS, DEPARTMENT OF THE ARMY, 601879
5-46 1948

INDEX TO ADJOINING SHEETS

106°37'30" 106°20'00" 106°22'30" 106°19'00"			
32°20'00"	32°18'00"	32°19'00"	32°17'00"
31°52'00"	31°51'00"	31°52'00"	31°53'00"
31°45'00"			
31°37'30"	31°36'00"	31°37'30"	31°38'00"

Sheet 4742 IV SW falls within SR
AMS 1:250,000

INDEX TO BOUNDARIES



COVERAGE DIAGRAM



COMPILED METHODS

	Photo-interpretation
	Map

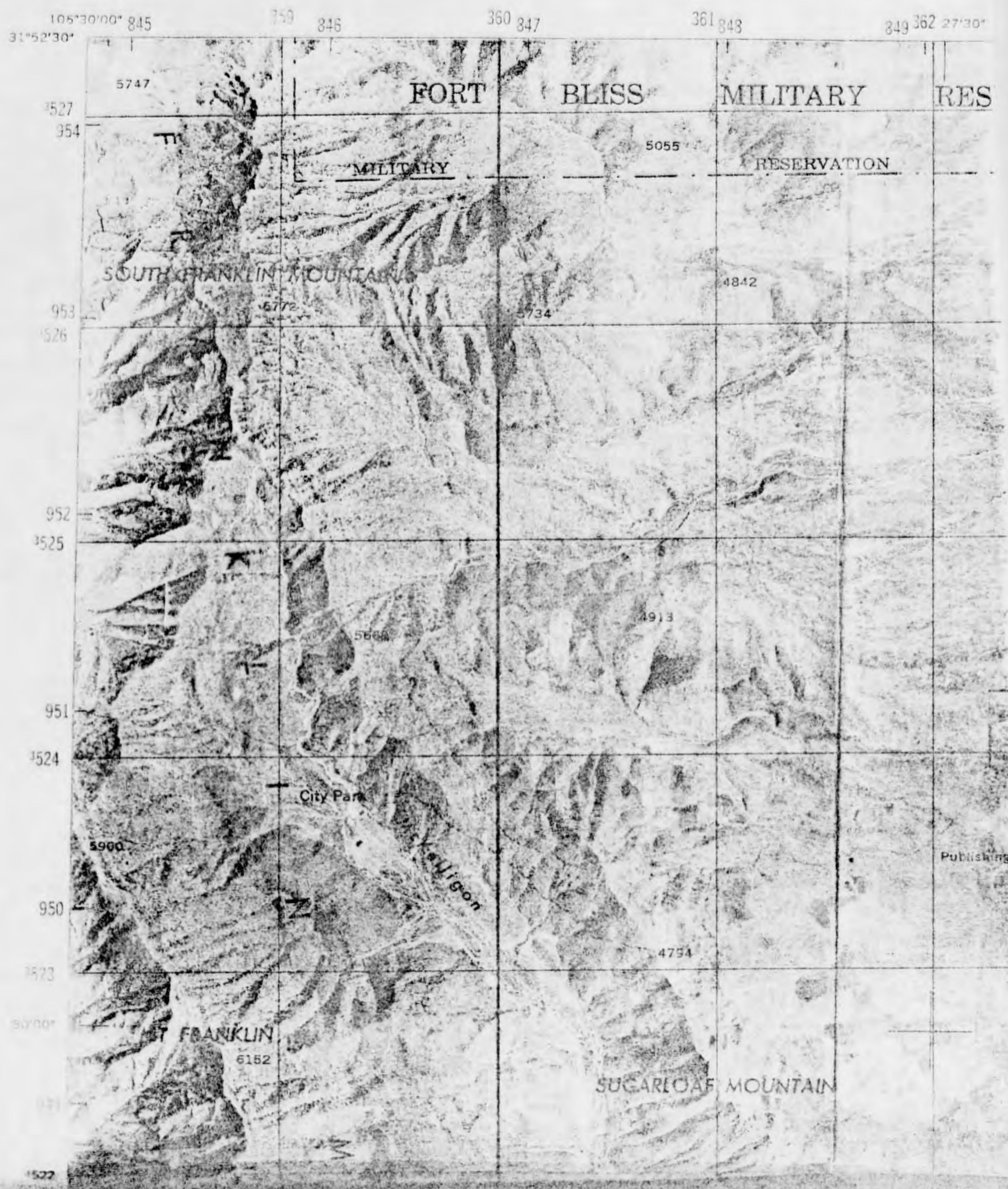
A. Texas, I, 52,000, USGS, Fort Bliss, 1943
(controlled ground survey, reliability good).
Dates of aerial photography, 1-1946, 2-1944.

EL PASO, TEXAS
EL PASO COUNTY
N3145-W10622.5/7.5

REVISION 1947
THIS SHEET
CHARTERED WESTERLY
To obtain numerical
or magnetic north line,
subtract 2° from the south
with the value of the
true north and mag-
netic variation
added on the degree
edge of the map.

TEXAS PHOTO MAPS 1:25,000

FIRST EDITION AMS 1





ARMED FORCES MAP SERVICE, CORPS OF ENGINEERS, DEPARTMENT OF THE ARMY, 1948

INDEX TO ADJOINING SHEETS

106°37'30"	106°30'00"	106°22'30"	106°15'00"
31°48'00"			
31°45'30"			
31°45'00"			
31°42'30"			

The index shows the following sheet numbers:

- Top row: 365 (NE), 366 (SW), 367 (SE), 368 (NW)
- Middle row: 369 (NE), 370 (SW), 371 (SE), 372 (NW)
- Bottom row: 373 (NE), 374 (SW), 375 (SE), 376 (NW)

EL PASO, TEXAS
FORT BLISS AND VICINITY
N3145-W10622.5/7.5

UNCLASSIFIED

Page 2

Incident 322

Name and address of observer:

[REDACTED]
Albuquerque, New Mexico

Occupation and hobbies:

Farmer

Comments of Interrogator relative to intelligence and character of observer(s):

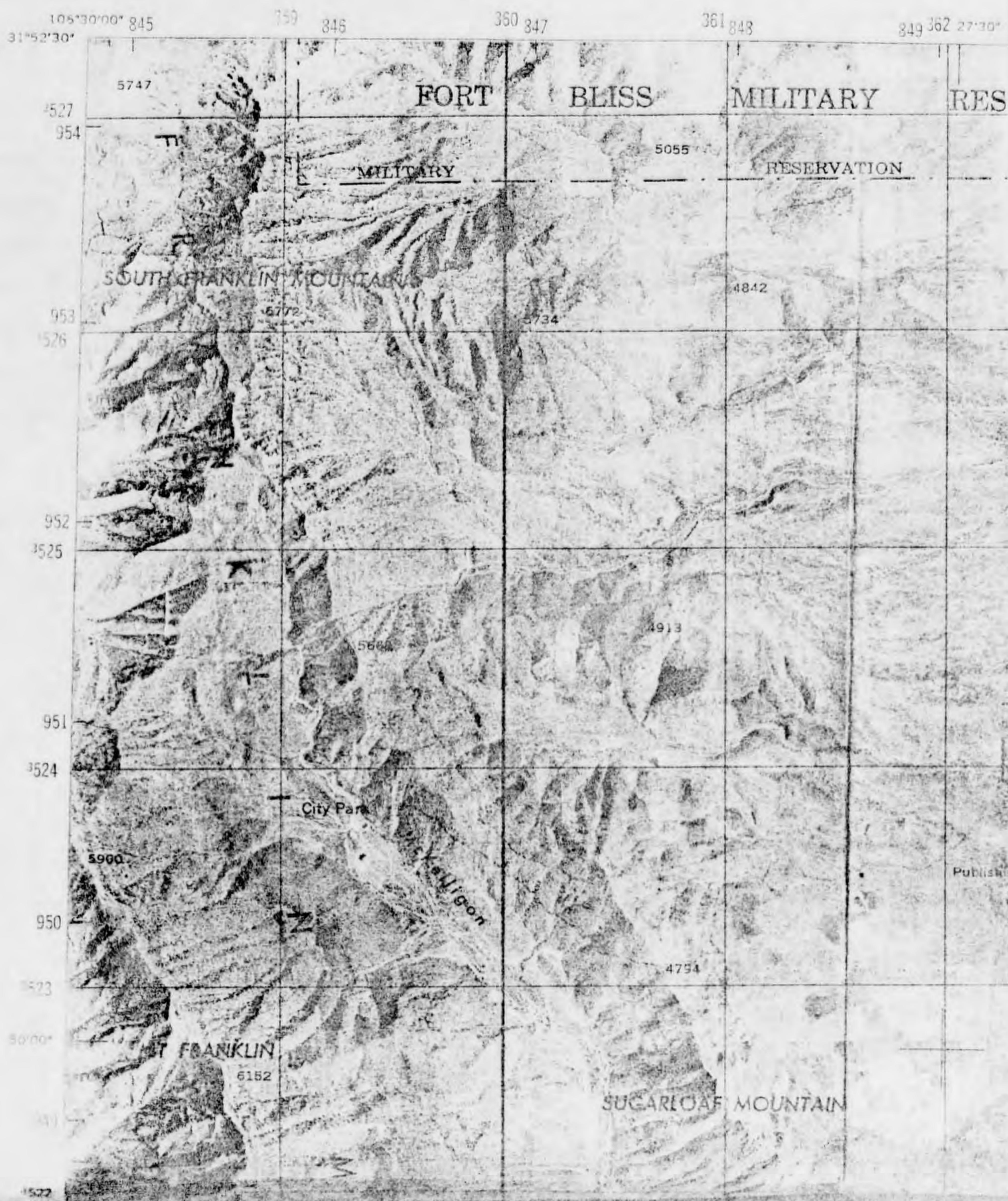
NARRATIVE SUMMARY:

See original Report in file with incident 318

UNCLASSIFIED

TEXAS PHOTO MAPS 1:25,000

FIRST EDITION AMS 1





SECTION-AMS 1

EL PASO

11° 12° 13° 14°
15°

349 362 27'30"

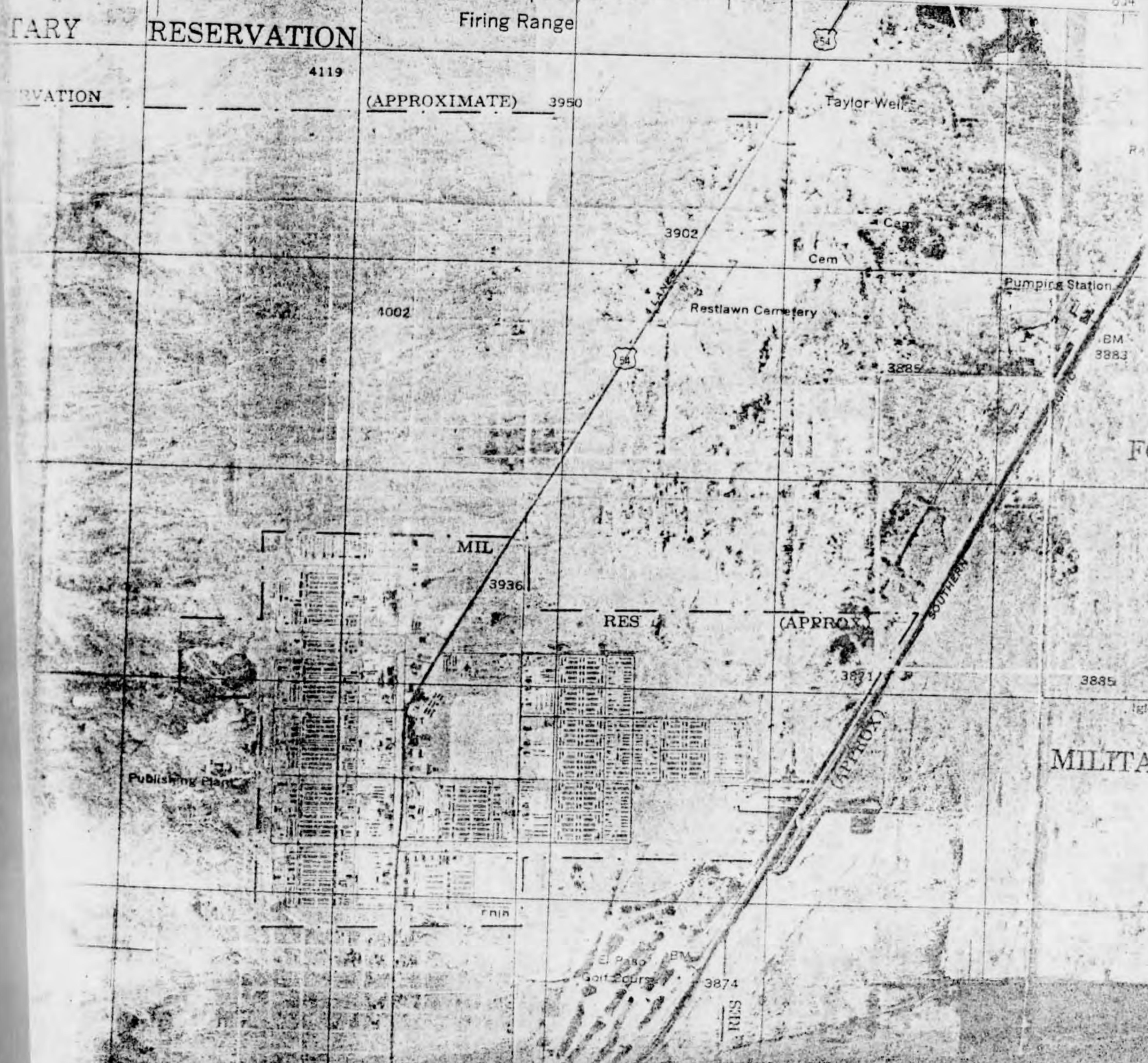
850 363

851 364

852 365

853 25'00" 366

854



MILITAR

UNCLASSIFIED

INCIDENT NO. 322

16

1. Date of Observation 30 April 1949 Date of Interview 2 May 1949
2. Exact Time (local) 2215
3. Place of Observation Albuquerque, New Mexico
4. Position of observer Ground
5. What attracted attention to object Light
6. Number of objects one
7. Apparent size 1/10 size of moon
8. Color of object Blue Green
9. Shape Round
10. Altitude 59° Elevation
11. Direction from observer 50°
12. Distance from observer
13. Direction of flight of object(s) East of West
14. Time in sight 2 Seconds
15. Speed 2° in 2 seconds
16. Sound and odor None
17. Trail None
18. Luminosity Bright as a Star
19. Projections
20. Maneuvers
21. Manner of disappearance Went out
22. Effect on Clouds.
23. Additional information concerning object
24. Weather Conditions. Clear

(over)

UNCLASSIFIED

7-3712-18

UNCLASSIFIED

Page 2

Incident 522

Name and address of observer:

[REDACTED]
Albuquerque, New Mexico

Occupation and hobbies:

Farmer

Comments of Interrogator relative to intelligence and character of observer(s):

NARRATIVE SUMMARY:

See original Report in file with incident 518

UNCLASSIFIED

CONFIDENTIAL
GUIDE TO INVESTIGATION

UNIDENTIFIED AERIAL OBJECTS

UNCLASSIFIED Incident No. _____

1. Date of Observation 30 April 1949 Date of Interview 2 May 1949
2. Exact time of observation (local) 2215
3. Place of Observation:
(Map Coordinates)
4. Position of observer (air, car, bldg, location of - give details):
Standing looking North.
5. What attracted attention to object:
Light
6. Number of objects and sketch of formation or grouping:
One
7. Apparent size (compare to known object, i.e., sun, moon, thumb or fist at arms length):
Tenth moon
8. Color of object:
Blue green
9. Shape (give graphic description - compare with known object):
Round
10. Altitude (Angle of elevation above horizon + 0° at horizon, 90° overhead):
59
11. Direction from observer (Angle clockwise from north):
50
12. Distance from observer (Distance to town, bldg, etc., over which object appeared to be):

13. Direction of flight of object (s): **DEGRADED AT 3 YEAR INTERVALS**
DECLASSIFIED AFTER 12 YEARS
East to West
DOD DIR 5200.10
14. Time in sight:
Two seconds
15. Speed (time to cover given angular distance):
Two seconds - two degrees
16. Sound and odor:
None

UNCLASSIFIED

CONFIDENTIAL

CONFIDENTIAL

UNCLASSIFIED

Incident No. _____

17. Trail (color, length, width, persistance, etc.)

No

18. Luminosity (visible by reflection, incandescent, other - degree of
brilliance):

Bright as two stars

19. Projections (fins, wings, rods, antennae, canopies, etc.):

None

20. Maneuvers (turns, climbs, dives, etc. - sketch of flight path):

None

21. Manner of disappearance:

Went out

22. Effect on clouds:

None

23. Additional information concerning object:

None

24. Weather conditions and light at time of sighting:

Clear

Name and address of observer:

[REDACTED], Albuquerque, N. Mex.

Occupation and hobbies:

Farmer

Comments of Interrogator relative to intelligence and character of observer
(Check neighbors, police dept., FBI records, employer, etc.):

Did observer wear glasses, especially polaroid glasses at time of sighting,
or was object viewed through canopy, window, or other transparent material?

UNCLASSIFIED

CONFIDENTIAL

**HEADQUARTERS FOURTH ARMY
FORT SAM HOUSTON, TEXAS**

452.1 AKADB

2 May 1949

SUBJECT: Unconventional Aircraft

TO : Commanding General
Air Materiel Command
Wright-Patterson Air Force Base
Dayton, Ohio
ATTN: M.C.I.

1. Reference letter, Director of Intelligence, General Staff, United States Army, CSGID 452.1, 25 March 1948, subject, "Unconventional Aircraft," and to Control No. A-1917.
 2. The inclosed report Headquarters Anti-Aircraft Artillery and Guided Missile Center, Fort Bliss, Texas, subject as above, AKBAAB 452.1, dated 28 April 1949, is forwarded for your information and any action deemed necessary.

FOR THE COMMANDING GENERAL:

MAX H. COOLER
Colonel, GSC
Actg AC of S, G-2

1 Incl
As stated w/2 incl's

DECLASSIFIED AT 3 YEAR INTERVALS.
DOD 1300-12-12 3 YEARS

TRANSMITTAL

REF RESTRICTED

ATSC FORM NO. 80-508 (1 JAN. 45)

FROM: NO NAME	DATE 5-19-45	IDENTIFICATION NUMBER S-40242
INCOMING +	INTER-OFFICE +	OUTGOING +
COMPLETE +	INCOMPLETE +	NO FILE COPY +
FILE COPY +	FILE COPY +	FILE COPY +

FROM: **HQ 10TH ARMY TO SAM BORROW THE TO: CG 10th ARMY**
REG. NO. **117701**

DESCRIPTION, DATES AND SUBJECT:

LDR 5-2 (2-2P) UNCONVENTIONAL A/C

INCLOSURES:

**1 LDR 4-28 (1-2P) 1/4 of Sketch Overlay of
map 2/4 (2-1P)-2 Section 2/4 (1-1P) (CONT) S-40242**

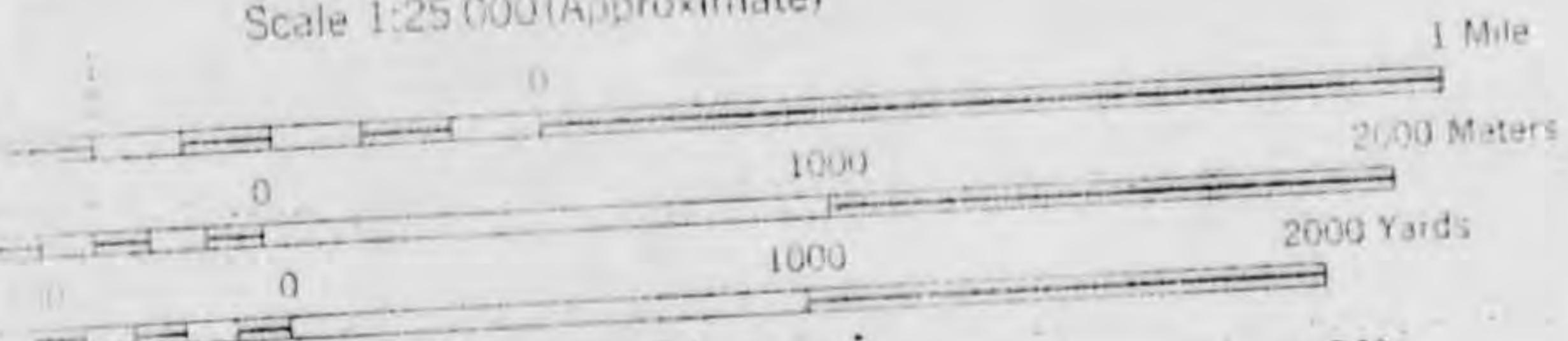
TO: (OFFICE SYMBOL)	COPY NO.	REC'D BY (FULL SIGNATURE)	DATE REC'D	HOUR
10TH ARY-1	COPY NO.	R Murphy	5-19	1130
	COPY NO.	RECD BY	DATE REC'D	HOUR
	5	Alexander Plana	5-19	935

RESTRICTED

CONTROL NO.	SU	OBJECT: Ltr Unconventional Aircraft Sec R	DECIMAL FILE NO. S-40242 S-752	FOLLOW UP ON
Q - 333				DATE
FROM: Fourth Army Ft Sam Houston TO: IAKS			DATED 5/9/49 Texas	2 No. INCLs.
RECORDING	AKT-1	DATE RECORDED	5/9/49	1430 HOUR
DESK				
ROUTED TO		SUSPENSE DATE	ESTABLISHED BY INITIALS	DATE
1 IAKS	N/A	Reut	10mg	
2				
3				
DATE OF REPLY	OTHER DISPOSITION:			TRANSMITTAL AMC FORM NO. 10-2 (20 NOV. 47) SEE OTHER SIDE FOR REMARKS



Scale 1:25 000 (Approximate)



TRANSVERSE MERCATOR PROJECTION
1927 NORTH AMERICAN DATUM

DATUM IS MEAN SEA LEVEL

AND METER UNIVERSAL TRANSVERSE MERCATOR GRID, ZONE 13

TICKS INSIDE THE HEADING INDICATE THE
1000 YARD U.S. POLYCONIC GRID, ZONE E

THE LAST THREE DIGITS OF THE GRID NUMBERS ARE OMITTED

ALL CHARTS OR DRAWINGS ON THIS MAP ARE URGED TO MARK HEREON AND FORWARD DIRECTLY TO COMMANDING
OFFICER, COAST AND GEODASTIC SERVICE, WASHINGTON, D.C. MAPS SO FORWARDED WILL BE RETURNED OR REPRINTED IF DESIRED.

HEIGHTS IN FEET

UNCLASSIFIED

Ltr, Hq, AAA & GM Ctr, file AKEAAB 452.1, subj: Unconventional Aircraft
dtd 28 April 1949

C
O
P
Y

Name and addresses of witnesses:

Major John R. Henderson, 82nd AAA AW Bn., Ft Bliss, Texas
Sgt Stephen Bornowski, Btry A, 5th AAA AW Bn., Ft Bliss, Texas
Cpl Ernest J. Linn, Btry A, 5th AAA AW Bn., Ft Bliss, Texas
Cpl Rayborn A. Joyner, Btry A, 5th AAA AW Bn., Ft Bliss, Texas
Pvt James L Brown, Btry A, 5th AAA AW Bn., Ft Bliss, Texas
Rct Samuel J Clark, Btry A, 5th AAA Aw Bn., Ft Bliss, Texas

Occupation and hobbies: All persons listed above as witnesses are in the military service.

Comments of interrogator relative to intelligence and character of observer: All personnel who observed this incident have arrived in this area recently. A check among officers and men of the unit reveal that their character are above reproach.

Did observer wear glasses, especially polaroid glasses at time of sighting or was object viewed through canopy, window, or other transparent material: Col Rayborn a Joyner was wearing ordinary sight adjustment glasses. All others were sighting with an eight (8) power telescope with which the M5A2 Director is equipped.

GENERAL

1. Teletype sequences of local weather conditions:

Clouds: Broken to overcast at 20,000 feet, visibility: Unlimited, Maximum temperature: 59 degrees F, Winds at 1000 to 1500 feet at 60 degrees with speed at 8 knots, Relative humidity at 1500 feet at 25 per-cent.

2. Winds aloft report: At 1000 to 1500 feet, from 60 degrees at 8 knots per hour.

a. Adiabatic chart for period in question: None available.

UNCLASSIFIED

DECLASSIFIED AT 30 yrs
DOD DIR 5200.1Q PY

UNCLASSIFIED

Ltr, Hq, AAA & GM Ctr, file AKBAAB 452.1, subj: Unconventional Aircraft,
dtd 28 April 1949

C
O
P
Y

3. Local flight schedules of commercial, private and military aircraft flying in vicinity at time: Military, commercial and private aircraft were flying in the vicinity of Biggs Air Force Base and El Paso Municipal Airport at the time of sighting.
4. Possible releases of testing devices in vicinity sent aloft by Ordnance, Navy Air Force, Weather Units, Research organizations or any other:

At White Sands Proving Ground, N.M. and Holloman Air Force Base, N. M., the "Skyhook Program" has been underway for the past three (3) days. This program consists of sending balloons of 150 feet in diameter, with instruments attached to record certain atmospheric conditions. These balloons are painted red and white. No guided missiles at either of the two installations cited above were launched during the period involved.

Negative results were received from Biggs Air Force Base.

5. Did object contact the earth: Object did not contact the earth.
6. Photographs or sketches: Sketches are attached hereto.
7. Signed statements: Signed statements were received and are being retained at this headquarters.
8. Obtain fragments or physical evidence where possible: Not possible.

FOR THE COMMANDING GENERAL:

2 Incis

1. Overlay of map stated in par 3 above
2. Sketches

DOWNGRADED AT 3 YEAR INTERVALS;
DECLASSIFIED AFTER 12 YEARS.
DOD DIR 5200.10

UNCLASSIFIED

C
O
P
Y

UNCLASSIFIED

Individuals report or description of the objects sighted with numbers and names listed below

Very highly Reflective on Top Only

1 -



Light reflected off of Top very shiny

2 -



Bright

3 -

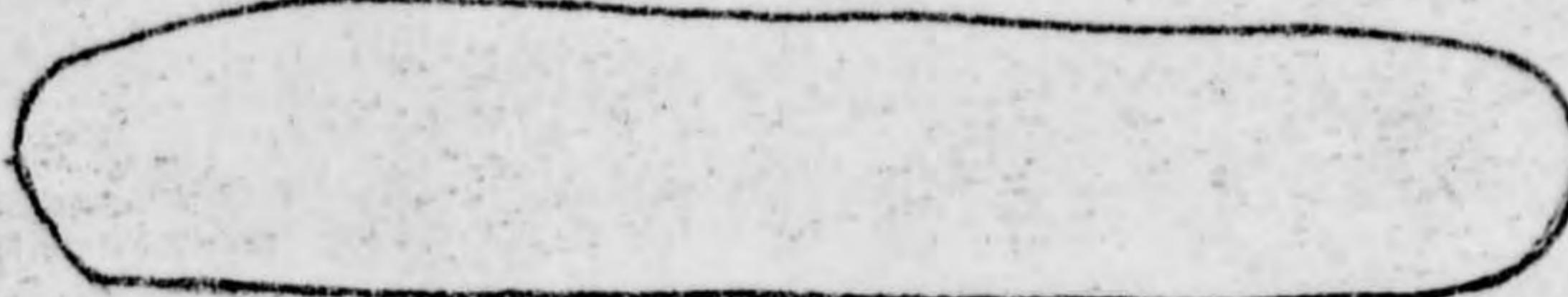


4 -

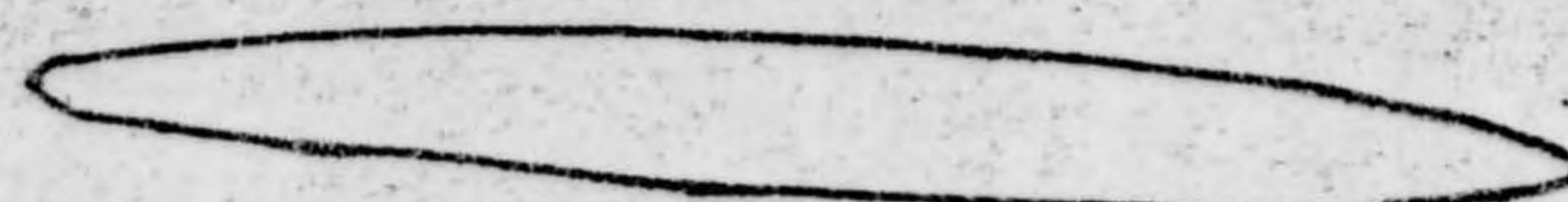


Shine

5 -



6 -



Reflection on Top a white Gleam

1. John R. Henderson
2. Stephen Borowski
3. James L. Brown
4. Ed Adcock Jr.
5. Samuel J. Clark
6. Ernest J. Lynn

DECLASSIFIED AT 3 YEAR INTERVALS;
DECLASSIFIED AFTER 12 YEARS
DOD DIR 5200.10

UNCLASSIFIED

NAD 37386

363

364

365

366

367

368

369

327

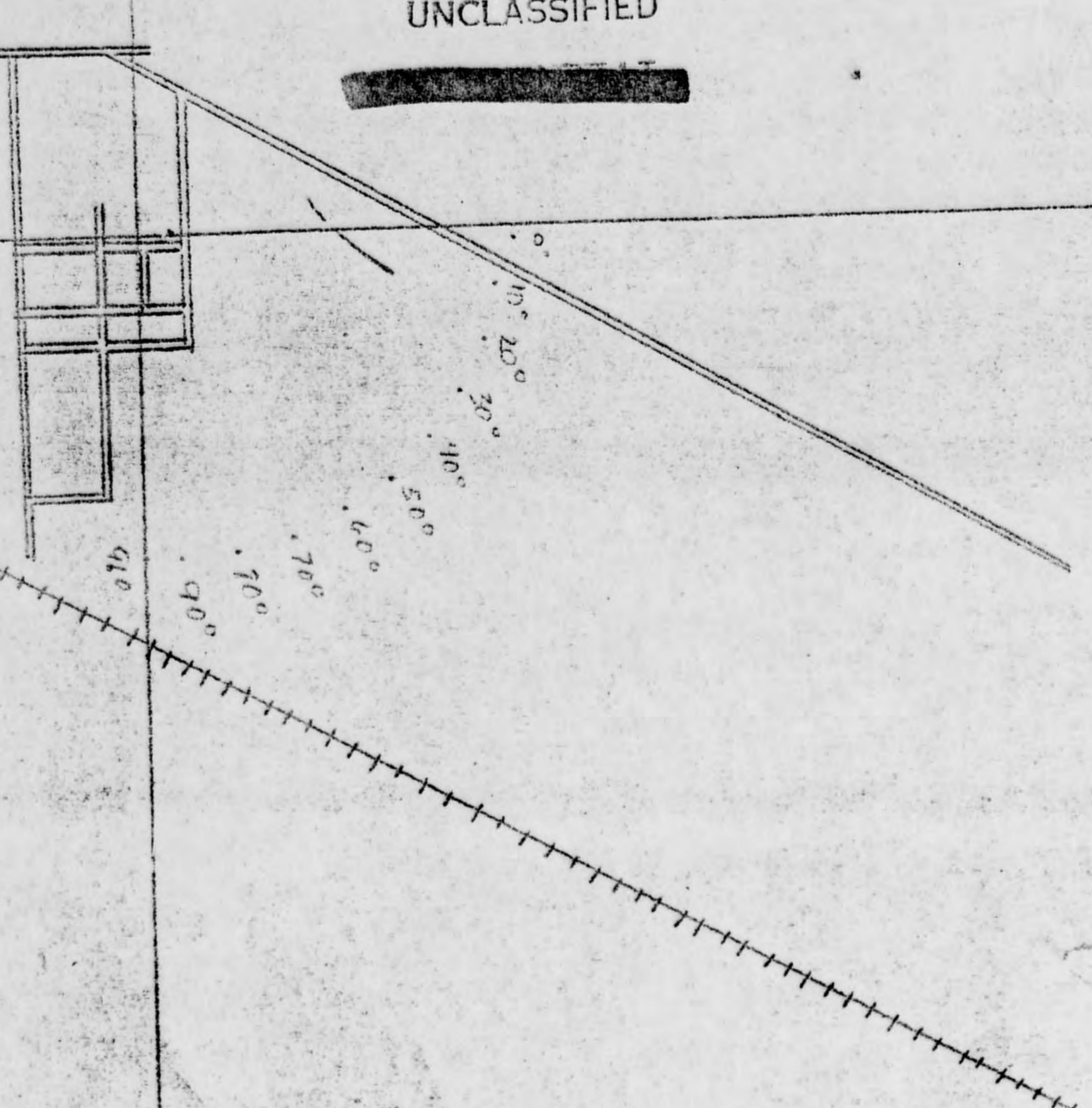
326

UNCLASSIFIED

525

526

527



DOWNGRADED AT 3 YEAR INTERVALS
DECLASSIFIED AFTER 12 YEARS
DOD DIR 5200.10

UNCLASSIFIED

NAD 37386

524

EL PASO AREA
SHEET 4747 IV QU
AMS SERIES VB2
1:25,000

Magnetic Declination - 13°30'

523

363

364

365

366

367

368

523

369

UNCLASSIFIED

Ltr, Hq, AAA & GM Ctr, file AKBAAAB 452.1, subj: Unconventional Aircraft,
dtd 28 April 1949

C
O
P
Y

7. Apparent size: About one-half ($\frac{1}{2}$) inch long. Object was sighted through an eight (8) power telescope of a M5A2 Director, with an amber filter.
8. Color of object: Silver, was shining like highly polished metal.
9. Shape: Flat, like a silver dollar.
10. Altitude: Angle of five (5) degrees.
11. Direction from observer: Due east (90 degrees)
12. Distance from observer: Appeared to be over the Huaco Mountain range, approximately 20 miles.
13. Direction of flight of object: Stationary
14. Time of sight: From 07⁴⁵ to 07⁴⁶ MST
15. Speed: Stationary
16. Sound or odor: None
17. Trail: No trail observed.
18. Luminosity: Very bright and the sun reflected off of object.
19. Projections: None noted
20. Maneuvers: Remained still in air.
21. Manner of disappearance: All at once - Object disappeared when cloud formations came between object and observer. When the cloud passed point of sighting, object could no longer be seen.
22. Effect on clouds: None - The clouds were all around the object but the object was in the clear sky.
23. Additional information concerning object: None
24. Weather conditions and light at time of sighting: Hazy

UNCLASSIFIED

DOWNGRADED AT 3 YEAR INTERVALS;
DECLASSIFIED AFTER 12 YEARS.
DOD DIR 5200.10



UNCLASSIFIED

P
Y HEADQUARTERS
ANTIAIRCRAFT ARTILLERY AND GUIDED MISSILE CENTER
Fort Bliss, Texas

AKBAAAB 452.1

28 April 1949

SUBJECT: Unconventional Aircraft

TO: Commanding General
Fourth Army
Fort Sam Houston, Texas
ATTN: A C of S, G-2

In compliance with letter, headquarters Fourth Army, file AG 452.1
AKADE, subject as above, dated 4 April 1949, the following report is submitted:

1. Date of observation: 28 April 1949
Date of interview: 28 April 1949
2. Exact time of observation(loc'l): 0745 MST
3. Place of observation: Observed from the NE corner of the
82nd AAA AW Bn., Logan Heights, Fort Bliss, Texas. (Map
1:25,000, El Paso, Texas sheet #4747 IV SW AMS series
V882) Coordinates 364-524.1 (see inclosure #1).
4. Position of observer: Outside at position indicated
under 3 holding gun drill.
5. What attracted attention to object: While tracking, per-
sonnel saw an object in the air, thought they were track-
ing aircraft, but the object did not move.
6. Number of objects and sketches of formation or group: Two
(2) sighted. See inclosure #2 for sketches.

UNCLASSIFIED

DOWNGRADED AT 2 YRS P
DECLASSIFIED AT 30 yrs P
FOR PUBLIC RELEASE BY 2035 P
2015-03-16 10:00:00 P

- Incident No. _____
1. Date of observation: 24 April. Date of Interview: _____
2. Exact time of observations: Between 1050 - 1055 MST.
3. Place of observation: $32^{\circ} 53' N$ $107^{\circ} 20' W$
(Map Coordinates)
4. Position of observer (air, car, bldg, location or - give details):
Ground, operating a theodolite tracking balloon.
5. What attracted attention to object: Turned to look at balloon with naked eye.
6. Number of objects and sketch of formation or grouping: One
7. Apparent size (compare to known object, i.e., sun, moon, thumb or fist distance): N. 02 (size of balloon 50 gm size at 15,000 feet)
8. Color of object: White
9. Shape (give graphic description - compare with known object): Elliptical,
around 2-1/2:1 slenderness ratio
10. Altitude (angle of elevation above horizon - 0° at horizon, 90° overhead);
Came in from 210° at 45° elevation. Passed through the sun, was about 35°
when due east then disappeared at 25° elevation about 25° east of north.
11. Direction from observer (angle clockwise from north): _____
12. Distance from observer (distance to town, bldg, etc. over which object
appeared to be): Unknown.
13. Direction of flight of object: See sketch.
14. Time in sight: Around 60 seconds. 60 seconds ←
15. Speed (time to cover given angular distance): Measured to be 5° azimuth/sec.
16. Sound and odor: None. Quiet--no trucks or planes near at time.
17. Trail (color, length, width, persistence, etc.): None
18. Luminosity (visible by reflection, incandescence, other--degree of
brilliance): Believed reflection.
19. Projections (fins, wings, rods, antennae, canopies, etc.): None visible.
Focus not good.

RESTRICTED

UNCLASSIFIED

UNCLASSIFIED

[REDACTED]

Guide to Investigation (Cont'd)

Winds!

Winds? Winds!

20. Maneuvers (turns, climbs, dives, etc. - sketch of flight path):
(See Sketch)
21. Manner of disappearance: Grew smaller rapidly then disappeared.
22. Effect on clouds: No clouds, no effect.
23. Additional information concerning subject: See report.
24. Weather conditions and light at time of sighting: Clear except for 1/10 cumulus to west, no dust, bright desert day.
25. Name and address of observer: [REDACTED]
[REDACTED] Minneapolis, Minn.

Occupation and hobbies: Chemical engineer; Meteorological Training Equipment, balloons) Member Balloon Crew, General Mills.

Hobbies: Astronomy.

Comments of interrogator relative to intelligence and character of observer (neek neighbors, police dept, FBI records, employer, etc.)

Did observer wear glasses, especially polaroid glasses at time of sighting, or was object viewed through canopy, window, or other transparent material?

DOWNGRADED AT 3 YEAR INTERVALS
DECLASSIFIED AFTER 12 YEARS
DOD DIR 5200.10

UNCLASSIFIED

COPY

[REDACTED]

UNCLASSIFIED

FOR AMG

TO Director of Intelligence, "Project Grudge"

fact the limit of binocular depth perception is reached at a distance of about 100 meters. We therefore conclude that the observer could not estimate the distance of the object from him. Since he could not estimate the distance then any assumption as to linear speed and/or elevation is without reason.

5. Let us for a moment assume that when first sighted the elevation of the object was 25° , the subtended angle $.02^\circ$ ($1' 12''$) and the angular velocity $5^\circ/\text{second}$. Let us further assume length of the object as 25 and 50 feet to determine if objects speed and altitude could be explained by present day aircraft.

A. Assuming length of 25 feet:

1. Distance from observer 71,450'
2. Altitude of object 30,126'
3. Linear Velocity 4,461 MPH

B. Assuming length of 50 feet:

1. Distance from observer 142,900'
2. Altitude of object 60,372'
3. Linear Velocity 8,921

6. In view of the above no identification is offered.

7. If further research on this incident is desired an independent study by each Project Grudge consultant will be requested.

FOR THE COMMANDING GENERAL,

2 Inclo.
1. Statement
2. Guide to Investigation

HAROLD E. NATION
Colonel, USAF
Acting Chief, Intelligence Department

UNCLASSIFIED

RESTRICTED

RESTRICTED

UNCLASSIFIED

UNCLASSIFIED

RECIPIENTS

RECIPIENTS/CC/UR

SUBJECT: Project Grudge

TO:

Headquarters USAF
Director of Intelligence
AFSC: Air Defense Branch
Major Dodge
Washington 25, D. C.

1. Reference is made to USAF R-1-375, Item 13 of 12 July 1948 regarding sighting of unidentified aerial object near Arroyo, New Mexico.

2. Enclosures 1 and 2 comprise the information submitted to Project Grudge relative to this sighting. On the basis of this information object was conservatively computed to be approx 100 feet long traveling at a speed near 17,000 MPH.

3. The receiving power of the unaided eye under normal lighting conditions is approximately one minute of arc. This is due or partly due to diffraction phenomena and to the coarseness of the retinal structure. With a 3 1/2 power theodolite the observer's resolution would be a maximum of .3 minute of arc or .005° subtended angle, therefore, it is possible and even probable that the .02° subtended angle reported is true, it is also possible although not probable that he could distinguish the ratio of length to width (given as 2 1/2:1), the width being on the lowest limit for resolution. At this lowest limit of resolution it would be impossible to distinguish color since the resolution becomes less when colored radiation is used.

4. Since this object was an unfamiliar one the observer could have no idea as to its usual size, without this the only method of determining the distance was by binocular depth perception. Here we encounter the

DOWNGRADED AT 3 YEAR INTERVALS;
DECLASSIFIED AFTER 12 YEARS
DOD DIR 5200.10

UNCLASSIFIED

UNCLASSIFIED



first edition (AMS 1), 19

Prepared under the direction of the Chief of Engineers by the Army Map Service (AM), Corps of Engineers, Department of the Army, Washington, D. C., 1948. Mosaic controlled by best average fit to SHEET 4717 IV SW, A.M. S. Series V882(AMS 1), Texas, 1:25,000. Aerial photographs flown by U. S. Army Air Force, September 1944.

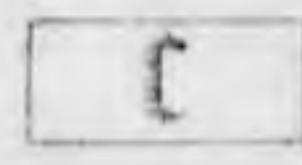
359 846

360 847

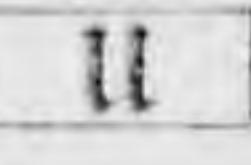
351⁸⁴⁸

LEGEND

Clouds _____



No photos available



Reliability of grid uncertain due to local minor disagreement between photo map and topographic map.

APPROXIMATE MEAN DECLINATION 1947
FOR CENTER OF SHEET
(ANNUAL MAGNETIC CHANGE 1° WESTERLY)

Use diagram only to obtain numerical values.
To determine magnetic north line, connect the pivot point "P" on the south edge of the map with the value of the angle between GRID NORTH and MAGNETIC NORTH, as plotted on the degree scale at the north edge of the map.

For ABC

~~RESTRICTED~~
To Director of Intelligence, "Project Grudge"

UNCLASSIFIED

fact the limit of binocular depth perception is reached at a distance of about 100 meters. He therefore concludes that the observer could not estimate the distance of the object from him. Since he could not estimate the distance then any assumption as to linear speed and/or elevation is without reason.

5. Let us for a moment assume that when first sighted the elevation of the object was 25° , the subtended angle $.02^\circ$ ($1' 12''$) and the angular velocity $5^\circ/\text{second}$. Let us further assume length of the object as 25 and 50 feet to determine if objects speed and altitude could be explained by present day aircraft.

A. Assuming length of 25 feet:

1. Distance from observer 71,450'

2. Altitude of object 30,125'

3. Linear Velocity 4,461 mph

B. Assuming length of 50 feet:

1. Distance from observer 142,900'

2. Altitude of object 60,372'

3. Linear Velocity 8,921

6. In view of the above no identification is offered.

7. If further research on this incident is desired an independent study by each Project Grudge consultant will be requested.

FOR THE COMMANDING GENERAL,

2 Inccls

1. Statement

2. Guide to Investigation

HAROLD E. NATION

Colonel, USAF

Acting Chief, Intelligence Department

UNCLASSIFIED

~~RESTRICTED~~

[1949]

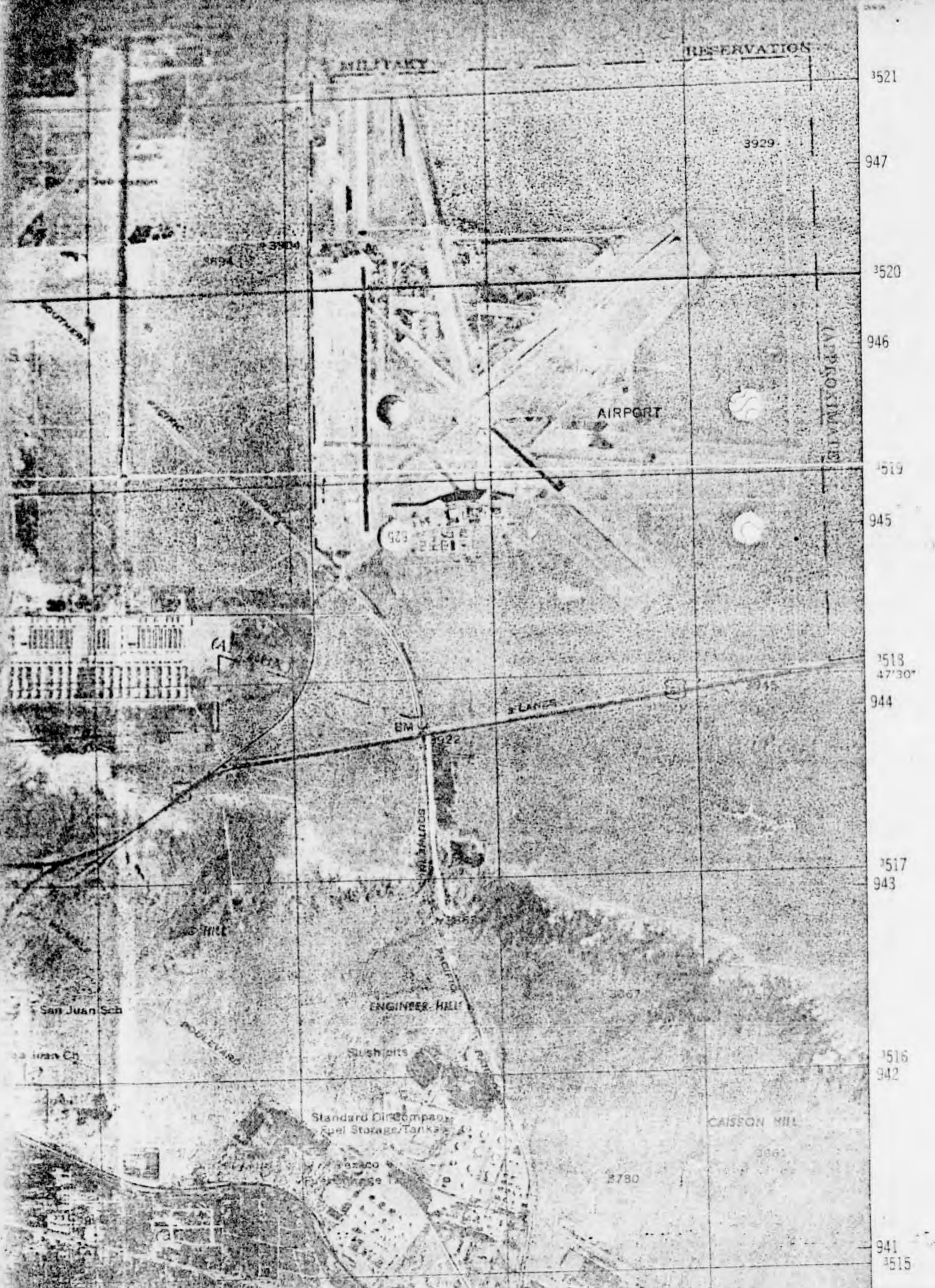
1 - 14 MAY / SIGHTINGS

<u>DATE</u>	<u>LOCATION</u>	<u>OBSERVER</u>	<u>EVALUATION</u>
May 2	Antartic (CASE MISSING)	Military	
2	Elko, Nevada	[REDACTED]	AIRCRAFT
3	Sidney, Ohio	[REDACTED]	AIRCRAFT
3	Dayton, Ohio	[REDACTED]	AIRCRAFT
3	Los Alamos, New Mexico	[REDACTED]	Astro (METEOR SHOWERS)
3	Hillsboro, Missouri	[REDACTED]	AIRCRAFT
4	Limona, Florida	[REDACTED]	Astro (MOON)
4	Maplewood, Ohio	[REDACTED]	AIRCRAFT
5	Fort Bliss, Texas	[REDACTED]	UNIDENTIFIED
6	Sidney, Ohio	[REDACTED]	AIRCRAFT
6	Camp Hood, Texas	[REDACTED]	Astro (VENUS)
6	Livermore, California	[REDACTED]	UNIDENTIFIED
7	St Louis, Missouri	[REDACTED]	AIRCRAFT
7	Camp Hood, Texas	[REDACTED]	1. AIRCRAFT 2. Astro (BETELGEUSE) 3. Astro (CAPELLA)
8	Camp Hood, Texas	[REDACTED]	BALLOON
8	Tuscon, Arizona	[REDACTED]	BALLOON
9	Tuscon, Arizona	[REDACTED]	UNIDENTIFIED
11	Watertown, New York	[REDACTED]	BALLOON
12	Holloman AFB, New Mexico	[REDACTED]	Astro (STARS/PLANETS)
12	Westfield, Indiana	[REDACTED]	AIRCRAFT
12	Roanoke, Virginia	[REDACTED]	AIRCRAFT
12-15	Osceala, Iowa	[REDACTED]	Other (REFLECTIONS)
13	Boise, Idaho	[REDACTED]	AIRCRAFT

ADDITIONAL REPORTED SIGHTINGS (NOT CASES)

<u>DATE</u>	<u>LOCATION</u>	<u>SOURCES</u>	<u>OBSERVER</u>

1 - 14 MAY

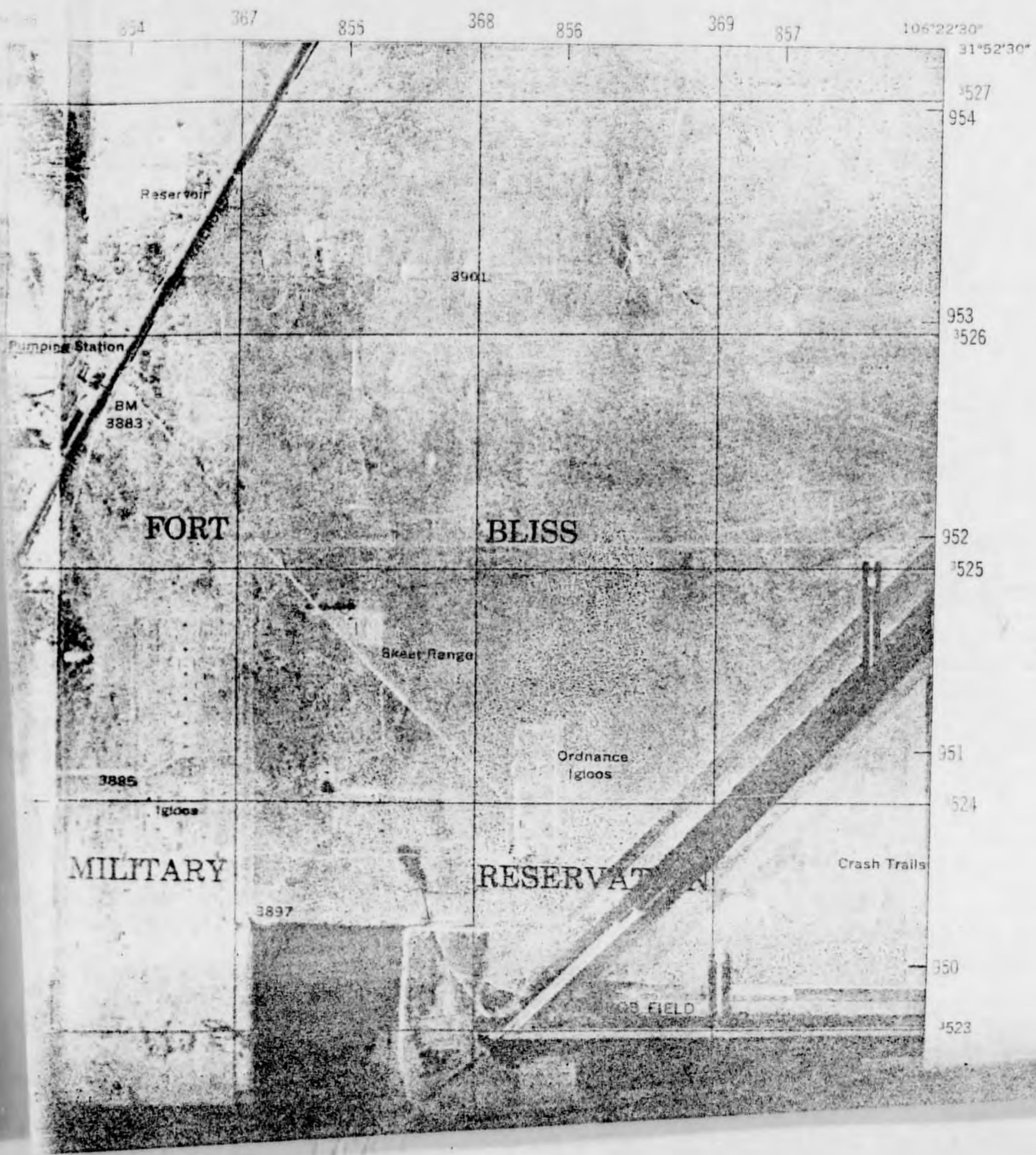






12° 13° 14° 15° 16°

SHEET 4747 IV SW
A.M.S. SERIES V082A



TEXAS PHOTO MAPS 1:25,000

FIRST EDITION - AMS 1

